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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/750,868	01/05/2004	Rolf Stefani	117154	3245

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EXAMINER

NGUYEN, CUONG H

ART UNIT	PAPER NUMBER
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3661

DATE MAILED: 01/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/750,868

Applicant(s)

STEFANI ET AL.

Examiner

CUONG H. NGUYEN

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11/03/05 (the RCE).
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11/03/05 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
- Paper No(s)/Mail Date _____

- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. This Office Action is the answer to the RCE received on 11/03/2005.
2. Claims 1-19 are pending in this application.

Drawings

3. This application is submitted with 5 sheets of formal drawings (Figs. 1-5), and they are acceptable by the examiner.

Remark

4. This pending application is directed to a quick access recorder; however, how quick is that recorder is a merely relative term compared to other recorders already in the market. The examiner requests a clear definition of the claimed “quick” recorder to distinguish from recorders in prior art (there is no definition of that “quick” in pending claims). The applicant seems to claim a device of FIG.5; however, pending claimed languages are a lot broader than Fig.5’s device.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claims 1-19 are rejected under 35 U.S.C. 112, first paragraph, as based on a disclosure which is not enabling. The claimed limitation (for independent claims 1, and 11) of: “information fusion and onboard reasoning processing” must be done together – not “the uses at least one of information fusion or onboard reasoning processing” as claimed (see the application’s supporting specification, para.[35]); this limitation is critical or essential to the practice of the

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invention, but not included in the claim(s) is not enabled by the disclosure. See *In re Mayhew*, 527 F.2d 1229, 188 USPQ 356 (CCPA 1976).

- Dependent claims (claims 2-10, and 12-19) of above independent claims are also rejected because they inherit above error from their parent claims.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office Action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-19 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Sudolsky (US Pat. 6,115,656), in view of Goebel et al. (US Pat. 6,757,668).

A. Re. To claims 1, 10-12, and 19: Sudolsky suggests a system and a method for monitoring, reporting and diagnosing fault information of a vehicle on a real time basis both within the aircraft and outside of the aircraft, comprising:

- a. a quick access recorder that records the fault information (i.e. an optical quick access recorder (OQAR), see Sudolsky, Fig.1 ref.18);
- b. a portable component (could be removable and using for diagnoses information/fault - e.g. an optical disk, see Sudolsky, Fig.1 ref.20);
- c. an onboard data communication network (for communicating information between a recorder and different component(s) (i.e. line replaceable units (LRUs) to communicate with communication bus, e.g., see Sudolsky, Fig.1 LRU blocks, and ref.15); and

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- d. a data transmitting device (see Sudolsky, APDMC 14 of Fig.1) for transmitting the fault information and diagnosis in real-time between the vehicle location and a receiver in another location (i.e. OQAR, see Sudolsky, Fig.1 ref.30).
- e. display components e.g., for displaying faults of claim 12 (see Sudolsky, Fig. Refs. 24, 26, 28, and 30).

The examiner respectfully submits that the cited prior art suggest transmitted information between aircraft and “a remote location” would include/cover related diagnosis or flight data (these are reasonable/related data for communicate/transmit).

Sudolsky does not explicitly disclose a component that uses information fusion (to provide analysis/diagnosis associated with recorded information).

However, Goebel et al. already teach about using information fusion (see Goebel et al., col.3 lines 10-12, col.6 lines 35-52, and col.19 lines 41-54).

It would have been obvious to one of ordinary skill in the art at the time of invention to combine Sudolsky and Goebel et al.’s suggestions to disclose a portable and removable component that uses information fusion to provide diagnosis associated with recorded fault information for the advantage of easy and efficiently diagnose symptoms of an aircraft for a correction without effecting the operation of other onboard components; further, it has been determined desirable to develop a fusion tool - provide different fault coverage - that gathers the output of different classification tools and leverages the advantages of each of the outputs.

B. Re. to dependent “system” claim 2: Sudolsky also teaches a quick access recorder comprises recording line replacement units (i.e. line replaceable units (LRU), see Sudolsky, the abstract,

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and ref. 18 of Fig.1's structure comprising an optical quick access recorder (OQAR)) – this would include so-called “portable hardware”.

C. Re. to dependent “system” claim 3: Sudolsky also teaches a system wherein the line replacement units are removable for further diagnostic (i.e. line replaceable units (LRU), see Sudolsky, the abstract, Fig.1 LRU blocks, and Fig.3A ref.138).

D. Re. To claims 4, and 16: Sudolsky also teaches a system comprising portable component for monitoring, diagnosing (see Sudolsky, Fig. 2 ref. 40), and reporting faults (see Sudolsky, Fig. 3A, refs. 134, 140, and 141) note that a rationale for rejection of this limitation is already provided in above claim, see sections 1.b. & 1.d.) – the examiner's position is Sudolsky suggests a system that has the same well-known above functionalities not necessary “an Electronic Flight Bag”.

E. Re. To claims 5, and 17: Sudolsky also teaches a system to perform real-time monitoring and analysis of data received from the quick access recorder (see Sudolsky, Figs. 1-2, and 4 – please note that a rationale for rejection of this limitation is already provided in above claim 1.c. & 1.d.).

F. Re. To claims 6, and 14: Sudolsky also suggests a system, comprising applications utilizes the on board data communications network to transmit notification of corrective messages to a crew (e.g., online communication reports, see Sudolsky, Fig.1 ref. 30 - note that a rationale for rejection of claim 14's limitation is already provided in above claim 1.d. – this claim's limitation is merely “initiating a corrective action after diagnosing”) – the examiner's position is Sudolsky suggests a system that has the same above functionalities, not necessary “an Electronic Flight Bag”.

G. Re. To claims 7, 9, 13, 15, and 18: Sudolsky suggests a system utilizing a remote air-ground data receiving/transmitting device/computer (see Sudolsky's "Radio Receiver-Transmitter" antenna, and Fig.1 refs. 26, 28, 30 – note that a step of "notifying maintenance personnel" of claim 15 is performed via ONLINE REPORTS communication; and a communication via an air-ground antenna is old and well-known; e.g. claim 15's limitation is merely "notifying to make a corrective action after diagnosing" – the examiner's position is Sudolsky suggests a system that has above claimed functionalities, not necessary using "an Electronic Flight Bag").

H. Re. To claim 8: Sudolsky suggests a system wherein the onboard data communication network is a data bus (i.e., ARINC 573 bus 15) that enables exchange of information (see Sudolsky, the summary, and Fig.1).

Sudolsky does not disclose about "Electronic Flight Bag" that host a suite of applications for monitoring, reporting, and diagnosing the fault information.

However, Sudolsky suggests claimed components that can perform those equivalent functions of monitoring, reporting, and diagnosing the fault information.

It would have been obvious to one of ordinary skill in the art at the time of invention to combine Sudolsky and Goebel et al.'s suggestions using "an Electronic Flight Bag" that host a suite of applications for well-known tasks of monitoring, reporting, and diagnosing fault information to provide a organized/portable/replaceable package that can efficiently handle wide ranging and diverse functions of a typical military aircraft which the LRUs are responsible for most controls, and insuring proper operations.

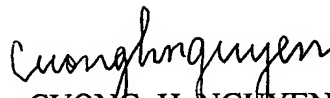
Conclusion

7. Claims 1-19 are not patentable.
8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to CUONG H. NGUYEN whose telephone number is 571-272-6759. The examiner can normally be reached on 9:30 am - 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, THOMAS G. BLACK can be reached on 571-272-6956. The Rightfax number for the organization where this application is assigned is 571-273-6759.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Please provide support, with page and line numbers, for any amended or new claim in an effort to help advance prosecution; otherwise any new claim language that is introduced in an amended or new claim may be considered as new matter, especially if the Application is a Jumbo Application.


CUONG H. NGUYEN
Primary Examiner
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